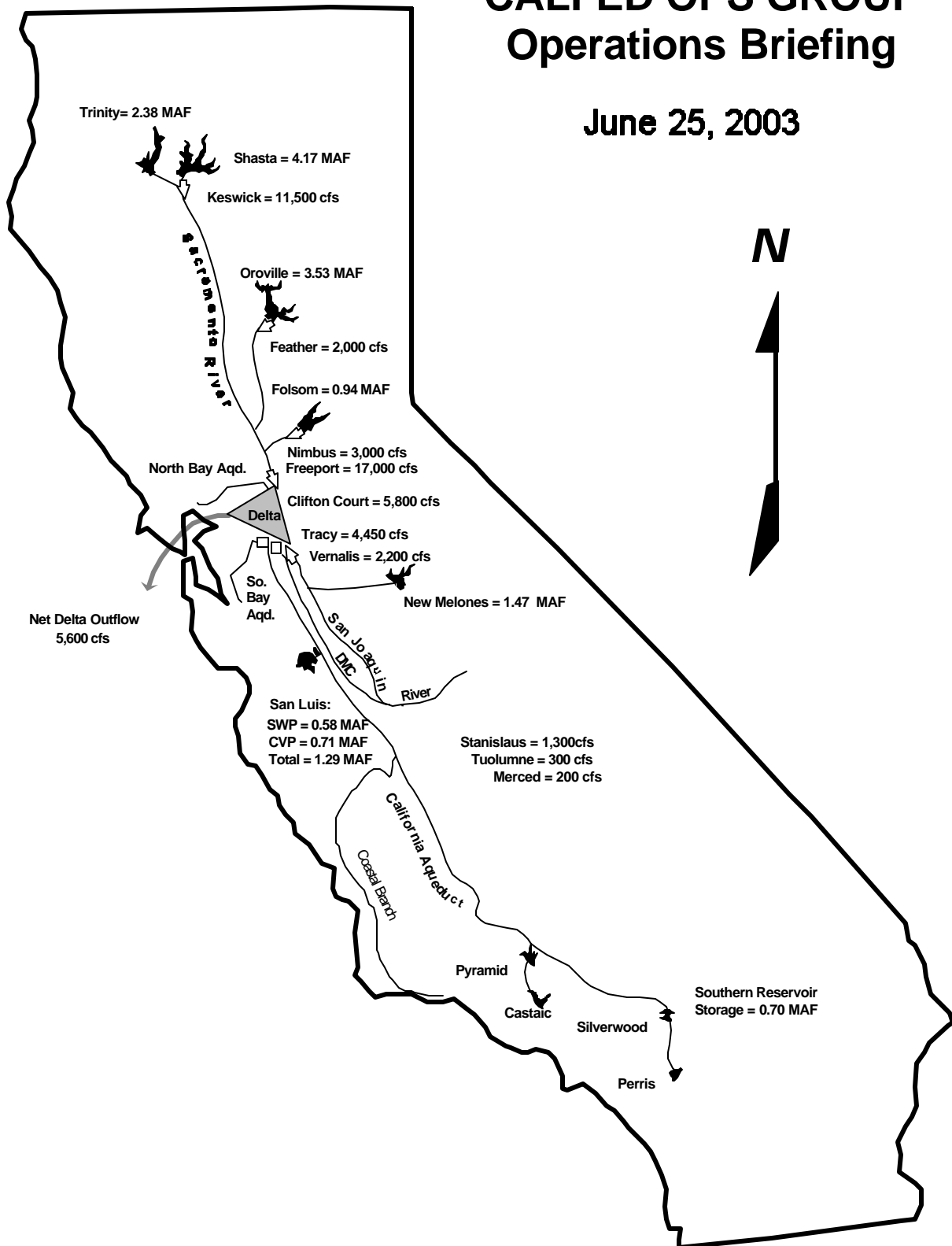


CALFED OPS GROUP Operations Briefing

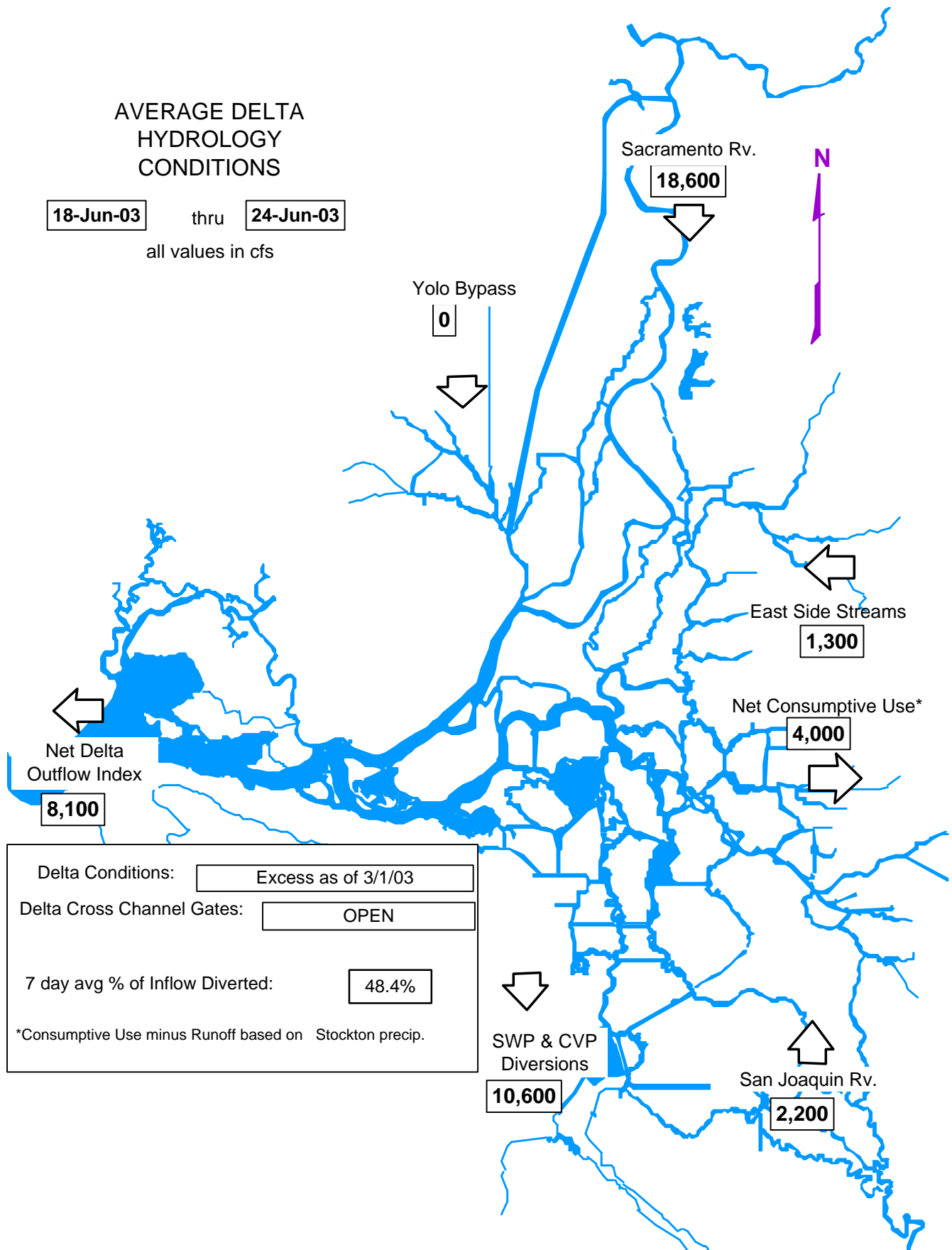
June 25, 2003



AVERAGE DELTA HYDROLOGY CONDITIONS

18-Jun-03 thru 24-Jun-03

all values in cfs



AVERAGE DELTA WATER QUALITY CONDITIONS

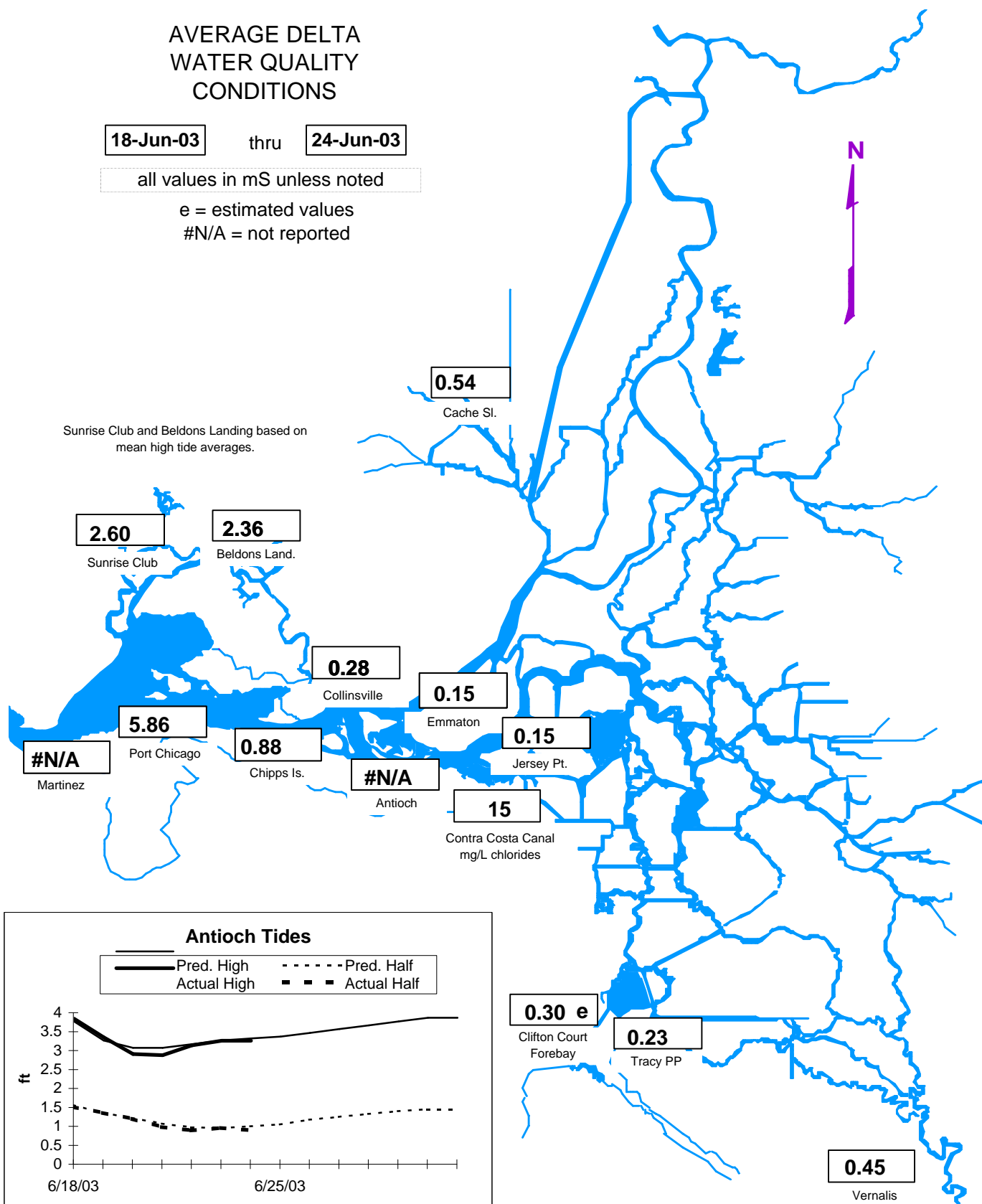
18-Jun-03 thru **24-Jun-03**

all values in mS unless noted

e = estimated values

#N/A = not reported

Sunrise Club and Beldons Landing based on mean high tide averages.



DRAFT

Bay-Delta Standards

Contained in D-1641

DRAFT

CRITERIA	Jul 03	Aug 03	Sep 03
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FLOW/OPERATIONAL

<ul style="list-style-type: none"> Fish and Wildlife <ul style="list-style-type: none"> SWP/CVP Export Limits Export/Inflow Ratio Minimum Outflow - mon. <ul style="list-style-type: none"> - 7 day avg. Suisun Marsh Habitat Protection Outflow, X2 River Flows: <ul style="list-style-type: none"> @ Rio Vista - min. mon. avg. <ul style="list-style-type: none"> - 7 day average @ Vernalis: Base -min. mon. avg. <ul style="list-style-type: none"> - 7 day average Delta Cross Channel Gates 			
	65% of Delta Inflow		
	8,000 cfs	4,000 cfs	3,000 cfs
	6,400 cfs	3,000 cfs	2,000 cfs
			3,000 cfs
			2,000 cfs

WATER QUALITY STANDARDS

<ul style="list-style-type: none"> Municipal and Industrial <ul style="list-style-type: none"> All Export Locations Contra Costa Canal 			
	CI \leq 250 mg/l		
	CI \leq 150 mg/l for 190 days		
<ul style="list-style-type: none"> Agriculture <ul style="list-style-type: none"> Western/Interior Delta Southern Delta 			
	14-dm \leq 0.45 mS/cm EC		
	30-day running average EC \leq 0.7 mS		
<ul style="list-style-type: none"> Fish and Wildlife <ul style="list-style-type: none"> San Joaquin River Salinity Suisun Marsh Salinity 			

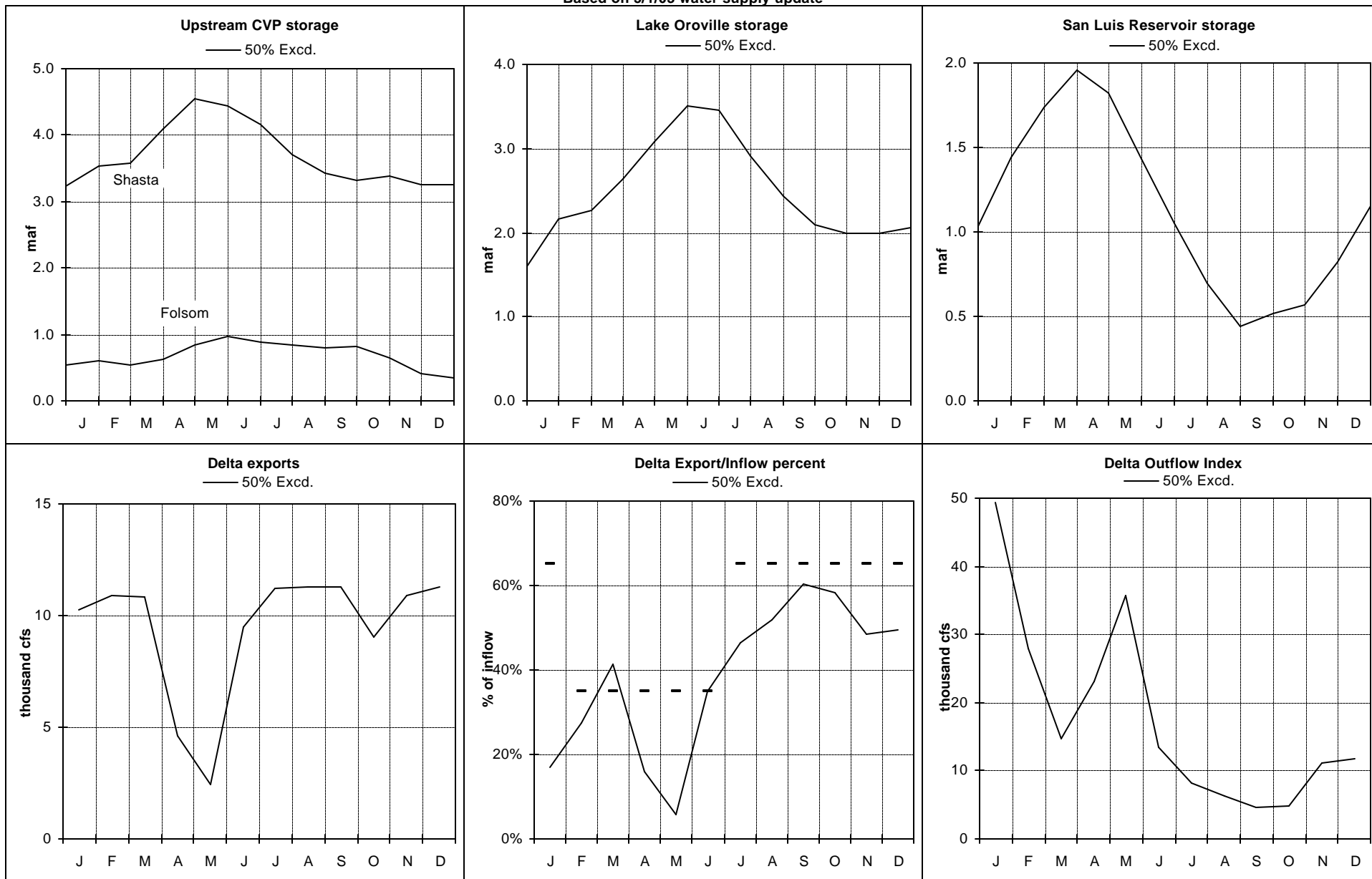
Water Year Classification: (May 1 forecast)

SRI (40-30-30 @ 50%) = 8.0 (AN)

SJV (60-20-20 @75%) =2.7 (BN)

SWP & CVP CY 2003 Forecasted Operations.

Based on 5/1/03 water supply update



Flows are monthly averages.

WY 2002/2003 EWA Accounting Summary
Based upon June 1 - 90% Exceedance Hydrology

Assumptions: SWP Allocation - 90%; NOD Purchases - 69.9 TAF; SOD Purchases - 145 TAF

EWA NOD and SOD Storage																	
1	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
NOD ⁰	27 ^{4,3}	1.7 ³	0.7 ³	5 ⁵							65 ⁶						71
SOD	37 ⁴																0

EWA Asset Acquisition in SWP San Luis ¹																	
2	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation							35			22							57
EWA share of SWP gain							19										19
Project Pumping to reduce EWA debt																	0
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²											19 ^{5,6}	12 ^{5,6}					31
Xfer NOD - San Joaquin River ²																	0
SOD SWP Surface/GW Purchases							7 ⁴		30 ⁴	36 ⁷	36 ⁷	36 ⁷	36 ⁷				182
Exchange of EWA assets																	0
Groundwater pumping SOD																	0
Exchange from CVP to SWP in SL																	0
Total Monthly EWA Assets		0	0	0	0	0	62	0	30	58	55	49	36	0	0	0	289

EWA Asset Acquisition in CVP San Luis																	
3	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
Project Pumping to reduce EWA debt							6										6
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²				0.5 ³								6.4	19 ^{5,6}				26
Xfer NOD - San Joaquin River ²																	0
SOD CVP Surface/GW purchases																	0
Exchange of EWA assets																	0
Groundwater pumping																	0
Exchange from SWP to CVP in SL																	0
Total Monthly EWA Assets	0	0	0	1	0	0	6	0	0	0	0	6	19	0	0	0	31

EWA Expenditures at the Export Pumps																	
4	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP export cuts ⁹				-32 ⁸	-89 ⁹			-19 ¹⁰	-182 ¹¹								-322
CVP export cuts									-25 ¹¹								-25
Total Expenditures	0	0	0	-32	-89	0	0	-19	-207	0	0	0	0	0	0	0	-347

EWA End-of-Month Incremental Storage Changes																	
5	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	11	0	0	-32	-89	0	62	-19	-152	58	55	49	36	0	0	0	-22
CVP in SL	-6	0	0	1	0	0	6	0	-25	0	0	6	19	0	0	0	0
NOD Storage ¹²	24	2	1	0	-2	0	0	-20	0	0	42	-23	-23	0	0	0	0
Groundwater SOD	37	0	0	0	0	0	-7	0	-30	0	0	0	0	0	0	0	0
Total Incremental Storage Changes	66	2	1	-32	-91	0	60	-39	-207	58	97	32	32	0	0	0	-22

EWA End-of-Month Storage Balance at Various Sites																	
6	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	11	11	11	-21	-111	-111	-49	-68	-220	-162	-107	-58	-22	-22	-22	-22	
CVP SL	-6	-6	-6	-6	-6	-6	0	0	-25	-25	-25	-19	0	0	0	0	
NOD Storage	24	26	27	26	25	25	25	5	5	5	47	23	0	0	0	0	
Groundwater SOD	37	37	37	37	37	37	30	30	0	0	0	0	0	0	0	0	
EWA Asset Balance	66	68	68	37	-54	-54	6	-33	-240	-182	-85	-54	-22	-22	-22	-22	

San Luis Reservoir Storage Conditions																	
7	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Storage (base case) ⁸		645	783	1037	1554	1856	2003	1886	1673	1287	909	624	667	637	656	709	
Encroachment																	
Total Storage (EWA case)		650	788	1010	1438	1739	1954	1819	1428	1100	778	547	645	615	634	687	
MWD Source Shifting																	
Storage (with MWD source shifting)		650	788	1010	1438	1739	1954	1819	1428	1100	778	547	645	615	634	687	

⁰ 2002 NOD Purchases = 135(YCWA) + 10(SGA). 2003 NOD Purchases = 185(YCWA) + 10(OWID). YCWA has firm 55 TAF; exercised option for an additional amount - 10 TAF.

¹ The SWP was able to back 20 TAF of water for the EWA into Lake Oroville between September 14 and October 6, 2002 (which includes a 20% carriage water loss). SOD equivalent = 16 TAF (not a 1:1 Exchange).

² Aqueduct conveyance and evaporation losses are not included.

³ Carriage water loss applies to water transfers from the Sacramento River; a 10% conveyance loss applies to water transfers from the San Joaquin River. A carriage water loss of 20% was applied to the 2002 water transfers.

⁴ 2002 SGA Transfer (CVP place of use).

⁵ 2002 KCWA Transfer (SWP place of use)

⁶ 2003 OWID Transfer (Joint place of use)

⁷ 2003 YCWA Transfer (Joint place of use)

⁸ 2003 SOD Transfers (SWP Place of Use) - 125 TAF from KCWA and 25 TAF from SCV

⁹ About 32 TAF was expended for the December portion of the 12/27/02 - 1/2/03 curtailment.

¹⁰ Of this amount, approximately 9.5 TAF was expended for the 1/1-1/2/03 portion of the 12/31/02-1/2/03 curtailment; about 60 TAF was expended for the 1/15-1/20/03 curtailment; about 20 TAF was expended for the 1/25-1/28/03 curtailment.

¹¹ The VAMP cost is estimated to be about 32 TAF for the SWP and is based upon the 4/30 estimate of base flows.

¹² The cost for VAMP shoulders is estimated to be about 169 TAF for the SWP; and 25 TAF for CVP.

¹³ The CVP released the following for instream benefits: 4.645 TAF of water (which is the San Juan portion of the SGA) between 12/20-12/29/02 from Folsom Reservoir.

The SWP may have released the 20 TAF of EWA water stored in Oroville for flood control purposes.

¹⁴ Based upon the 6/1/2003 DWR's 90% (90% Fall) allocation study.